

March 24, 2014

## **FACT SHEET: Italy Highly Enriched Uranium and Plutonium Removals**

Italy has been a global leader in nuclear nonproliferation, working with the United States since 1997 to eliminate more than 100 kilograms of highly enriched uranium (HEU) and separated plutonium.

At the 2014 Nuclear Security Summit, the United States and Italy announced the successful removal of all eligible fresh HEU and plutonium from Italy. These shipments were completed via a joint effort between the Department of Energy/National Nuclear Security Administration's Global Threat Reduction Initiative (GTRI) and Italy's Società Gestione Impianti Nucleari (SOGIN). This is the thirteenth shipment of material from Italy to the United States under this program.

At the 2012 Nuclear Security Summit, Italy and the United States pledged to work together to remove this material prior to the 2014 Nuclear Security Summit. The material was located at three SOGIN facilities in Italy (EUREX Plant - Saluggia, IPU and OPEC Plants - Casaccia, and ITREC Plant - Trisaia). More than 17 kilograms of HEU and plutonium were removed, including UK and U.S.-origin material stemming from research and development activities in Italy. Prior to removal, the material was securely stored under International Atomic Energy (IAEA) safeguards. In order to complete this project, GTRI and SOGIN needed to overcome significant technical challenges including:

- Development of new gloveboxes for plutonium packaging;

- The development of a new process to convert HEU from a solution to an oxide;
- Coordination of uranium shipments from the three separate locations;
- Development of novel packaging configurations for the consolidation of plutonium materials within Italy; and
- Training and certification of personnel for specialized packaging operations.

Despite the significant technical challenges, the team was able to successfully complete the operation on schedule. Other significant contributors included Italy's nuclear regulator (ISPRA), which ensured the material was processed and packaged to allow for safe transport; Italy's Ministries of Defense and Interior, which ensured the security of the shipment while in transport in Italy; and the UK's International Nuclear Services, which provided for the secure transport of the material from Italy to the United States.

This material will be stored at secure facilities in the United States until it is disposed of or downblended to LEU and utilized for civilian purposes. The United States and Italy plan to continue to work together to eliminate additional stocks of special nuclear material to make sure they never fall into the hands of terrorists, and are prepared to help other countries do the same.

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